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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): 4740-251

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Typed or printed name _____

Application Number	Filed
10721951	2003-11-25

First Named Inventor: Chen

Art Unit	Examiner
2616	Yuen

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- ☑ attorney or agent of record. Registration number 44958.
- ☐ attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

Signature

Michael D. Murphy
Typed or printed name

919-854-1844
Telephone number

2008-08-12
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of **Chen**, *et al.*	)	
Serial No.: **10/721,951**	)	PATENT PENDING
Filed: **November 25, 2003**	)	Examiner: Kan Yuen
For: **Power-Based Rate Adaptation of Wireless Communication Channels**	)	Group Art Unit: 2616
Docket No: **4740-251**	)	Confirmation No.: 5862

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12 Aug. 2008 — Date

Laura A. Wade

This correspondence is being:

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ARGUMENTS IN SUPPORT OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 1-42 are pending. "Kim" (U.S. Pub. 2002/0141349) is alleged as anticipating claims 1, 2, 11-14, 23, 24, and 33, under 35 U.S.C. § 102(b), while claims 3, 4, 6, 7, 15, and 25-32 are rejected under 35 U.S.C. 103(a) as obvious over the combination of Kim and "Mimura" (U.S. Pat. 6,393,005). All rejections are appealed.

Independent claim 23 includes the following text:

> 23. (Original) A radio base station for use in a wireless communication network, the method comprising:
>
> transmitter circuits to transmit radio signals on one or more forward link communication channels to mobile stations; and
>
> a forward link processing circuit to control the transmitter circuits;
>
> said forward link processing circuit configured to set a data rate for a communication channel to be used for transmitting data to a mobile station at a variable transmit power that is controlled upward and downward by the mobile station as needed to achieve a desired received data quality at the mobile station; and

said forward link processing circuit comprising a rate adaptor circuit configured to:
monitor transmit power information for the communication channel as an indication of current radio conditions at the mobile station; and
change the data rate for the communication channel based on the transmit power information.

On p. 7 of the Final Office Action (FOA), the examiner states that elements "32, 33, and 34 [of Kim] can be the [claimed] forward link processing circuit." From claim 23, the claimed forward link processing circuit controls the base station's transmitter circuits in their transmission of radio signals to mobile stations on one or more forward link communication channels. Conversely, Kim teaches that item 32 is an interference level detector 32 that detects *reverse link interference levels* in mobile station signals received by a base station 30—see paragraph [0043]. Item 33 is a comparator that compares the interference levels to transmission energy levels required for each mobile station, and item 34 is a "determinator" that determines *a reverse link data transmission rate adjustment* for each mobile station based on the comparison—see paragraphs [0046], [0048], and [0049] in Kim, as well as steps S64, S66, and S66, in Fig. 6 of Kim.

The teachings in Kim relied upon for the rejection of claim 23 are reverse link teachings and not forward link teachings, nor are Kim's reverse link teachings functionally the same as the claimed forward link functions. The anticipation rejection of claim 23 fails on this basis alone.

The examiner's confusion between forward link and reverse link processing in Kim is further apparent in the last sentence on p. 7 of the FOA, where the examiner states that Kim's transmission processor (which Kim describes as sending reverse link data rate adjustments to mobile stations) can be the claimed "forward link processing circuit configured to set a data rate for a communication channel to be used for transmitting data to a mobile station at a variable transmit power that is controlled upward and downward by the mobile station as needed to achieve a desired received data quality at the mobile station

(see fig. 2, box 21, 22, 23, and 24 and see fig. 3, determinator box 34, and see paragraph 0039, lines 1-14)." This statement overlooks the fact that the whole process described by Kim in the cited sections describes the determination of reverse link data transmission rate adjustments, based on Kim's base station 30 detecting the level of reverse link interference.

Under the law of anticipation, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). It is clear that Kim does not teach each and every element of claim 23—Applicant submits that it teaches none of the elements of the claim—and the anticipation rejection of claim 23 therefore fails as a matter of law and will not be upheld on appeal.

The legal inadequacy of the anticipation rejections of dependent claims 24 and 33 is self-evident; one need only compare the teachings of Kim as described by the examiner with the actual teachings of Kim to recognize that the anticipation rejections of claims 24 and 33 are unsupported by any evidence. Additionally, all obviousness rejections of claims depending from claim 23 fail as a matter of law, because they rely on Kim for the same teachings used to make out the erroneous anticipation arguments, and because the secondary obviousness reference (Mimura) does not provide the teachings missing from Kim.

Similar defects are found in the anticipation rejection of claim 1 and its dependent claims 2, and 11-14. Claim 1 includes the following text:

> 1. A method of channel data rate adaptation in a wireless communication network, the method comprising:
>
> setting a data rate for a communication channel to be used for transmitting data to a remote receiver at a variable transmit power that is controlled upward and downward by the remote receiver as needed to achieve a desired received data quality at the remote receiver;
>
> monitoring transmit power information for the communication channel as an indication of current radio conditions at the remote receiver; and

changing the data rate for the communication channel based on the transmit power information.

The examiner relies heavily on Fig. 3 and paragraphs [0043] and [0046] in Kim for the anticipation rejection. Fig. 3 illustrates a base station 30, and paragraphs [0043]-[0046] in Kim teach that a base station 30 transmits transmission data rate adjustment information to mobile stations, based on detecting the level of reverse link interference at the base station. The disconnect between these teachings in Kim and the plain language of claim 1 is apparent in the rejection arguments, which rely on impermissible claim language construction and an inter-mixing of Kim's base station operations and Kim's mobile stations operations that distorts Kim's actual teachings. Referring to Item 2 on p. 2 of the FOA, the examiner equates Kim's detection of reverse link interference with the claimed monitoring of transmit power information. Justification for this misconstruction rests on the examiner's assertion that Applicant "did not specifically defined [sic] what is transmit power information, therefore the signal interference level can be broadly interpreted as the [claimed] transmit power information."

No one skilled in the art would equate "transmit power" with "interference level." Nor would anyone skilled in the art equate the monitoring of transmit power information for a signal being transmitted (as in claim 1), with detecting interference levels for signals being received (as in Kim). The examiner's claim construction is unreasonable and is at odds with the plain language of the claim, the specification, and the meaning that one of ordinary skill in the art would give in view of the specification.

The illogic of this claim construction is further seen in the anticipation rejection of claims 11-14. Claim 11 defines the "monitoring" of claim 1 as "monitoring power control commands sent from the remote receiver that are associated with controlling the transmit power of the communication channel." The Final Office Action states that Kim at paragraph [0048] teaches "the signals or commands that are received from the mobile stations can be used to determine the transmission energy level (power) required for each mobile station." Kim actually seems to

teach that the levels of reverse link interference and data transmission rates can be used to determine transmission energy levels required at a mobile station. Regardless, paragraph [0048], nor any other paragraph in Kim, says anything about monitoring power control commands. Nor, it may be said, is there the first shred of evidence that Kim teaches the use of filtered power control commands, as stipulated in claim 12.

For at least the above reasons, the anticipation rejections of claim 1, 2, 11-14, 23, 24, and 33 fail as a matter of law, as do the obviousness rejections of claims 3, 4, 6, 7, 15, and 25-32. In view of the legal shortcomings of the rejections, Applicant respectfully requests that the instant application be allowed, or, at a minimum, that prosecution be reopened.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

Dated: 12 Aug. 2008

Michael D. Murphy
Registration No.: 44,958

1400 Crescent Green, Suite 300
Cary, NC 27518

Telephone: (919) 854-1844
Facsimile: (919) 854-2084